computing speeds and loads, and wherein the conference server is capable of transmitting said shared portion of said data set to two or more clients in parallel.

3. (Amended) A computer network system for sending dynamic data to a plurality of clients of differing capabilities, comprising:

a server;

a plurality of intermediate servers each connected to the server, wherein said server is capable of transmitting a data stream to each of said plurality of intermediate servers; **[and]**

wherein each of said **[a]** plurality of clients is connected to at least one of the plurality of intermediate servers; **[each client connected to an intermediate server,]**

wherein each of said plurality of intermediate servers is capable of forwarding said data stream, or a version thereof, to each of said plurality of clients connected thereto;

wherein each of said plurality of intermediate server includes a means for analyzing said data stream**[ing]**, or said version thereof, **[from the server]** and a means for determining for each of said plurality of clients connected to said intermediate server whether to discard **[dropping]** elements of the data stream based on network load and speed and downstream client load and speed to maintain a substantially real-time data stream.

4. (Amended) A method of sharing dynamic data between multiple nodes on a network where the dynamic data is updated at a rate dependent on the network connection speed and load and the node computing speed and load, the method comprising the steps of:

outputting data from a source node in an output data type selected from a group of data types consisting of base uncompressed data, base compressed data, differenced uncompressed data and differenced compressed data, wherein the output data type is selected based on the network connection speed and load and the source node computing speed and load;

inputting data to a destination node in an input data type selected from a group of data types consisting of base uncompressed data, base compressed data, differenced uncompressed data and differenced compressed data, wherein said destination node is capable of handling any one of the data types in said group of data types given the appropriate network

connection speed and load and the destination node computing speed and load, and wherein the input data type is selected based on the network connection speed and load and the destination node computing speed and load;

transforming the output data from the output data type to the input data type when the output data type is different from the input data type**[, transforming the output data from the output data type to the input data type]**;

dropping intermediate data updates at a network connection between the source node and the destination node, when an intermediate update cannot be handled at the network connection speed and load; and

dropping intermediate data updates at the destination **[client]** node when said intermediate update cannot be handled at the destination **[client]** computing speed and load.

8. (Amended) The method of claim 4, further comprising a step of determining whether a transformation of a data element in the data stream is needed at a node to keep the data stream matched to a client display parameter or to transform the data element so as to allow the destination node to receive the data stream substantially in real-time **[to keep the data being received by the destination node being received substantially in real-time]**.

10. (Amended) The method of claim 4, further comprising the steps of:

[analyzing data in the data stream;]

determining whether **[if]** the output data, or portions thereof, are **[is not going]** to be used by the destination node **[a downstream client]** based on the destination node's **[client's]** update speed and current view space; and

dropping the output data, or portions thereof, when it is determined that the output data, or portions thereof, are not to be used by the destination node **[if data in the data stream will not be used as determined in the determining step, dropping the data from the data stream]**.

11. (Amended) The method of claim 4, further comprising a step of **[dynamically]** adapting the output data type and the input data type dynamically in accordance with the changing availability of network connections and computing resources at the source

node and the destination node **[to screens and processors used at sources and destinations and to the network connections used]**.

a3

12. (Amended) The method of claim 11, further comprising a step of migrating transcoding processes, wherein said transcoding processes can be migrated to any one of said multiple nodes based on the network connection speed and load and the node computing speed and load **[presenter, server and attendee capabilities]**.

a4

15. (Amended) The method of claim 4, wherein the dynamic data is a conference display, the source node is a presenter client, and the destination node is an attendee client, the method further comprising the steps of:

dividing a presenter client display into a plurality of frames, wherein the number of frames used for the presenter client display is a function of network capacity and presenter client computation resources;

comparing each frame in a current display with a corresponding frame in a prior display to determine which frames of the plurality of frames are changed frames; and

transmitting changed frames from the presenter client, omitting unchanged frames when necessary in accordance with network capacity and presenter client computation resources to allow a presentation to occur at **[an]** the attendee client in substantially real-time.

16. (Amended) The method of claim 15, wherein the number of frames is determined dynamically **[dynamic]** based on changing network and presenter client conditions.

17. A conferencing client-server system for presenting conferences from a presenter client process to an attendee client process, comprising:

a plurality of nodes, wherein each node comprises a means for building a data structure for showing a conference;

a network for connecting each of the plurality of nodes to others of the plurality of nodes; and

a means for adjusting a flow of conference data to each of the plurality of nodes, the flow being adjusted for each node to accommodate the computing resources available at the node and the bandwidth and resources available on the network portion connecting the node;

wherein each of the plurality of nodes maintains a version of a shared portion of the conference data, and wherein the means for adjusting the flow of conference data is capable of controlling the flow to the plurality of nodes in a parallel manner.

22. The method of claim 4, wherein the dropped intermediate data updates are rendered obsolete**[updates which are obsoleted]** by later-arriving data updates sent without notice to the source node **[sender]** subsequent to the dropped intermediate data updates being dropped.

Please cancel claims 18-21 in their entirety without any prejudice.

REMARKS

Specification Objections

The specification has now been amended to correct all the informalities. Applicants submit that these corrections are now sufficient to overcome the Examiner's previously raised objections.

Election/restriction

Applicants acknowledge and hereby affirm that during a telephone conversation with Mr. Philip Albert (Applicants' legal representative for the present application) on 7/30/99, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-17 and 22. Applicants hereby elect to withdraw claims 18-21 from further consideration.

Drawings

Applicants hereby acknowledge receipt of the Notice of Draftsperson's Patent Drawing Review and, pursuant to MPEP 608.02(q), elect to delay the filing of any new drawings until this present application is allowed.

Claim Rejections